IN THE CLAIMS

Please amend the claims as follows:

Claims 1-15 (Canceled).

Claim 16 (New): A map providing apparatus that receives, from a portable terminal including at least a display unit, location information indicative of a location of a portable terminal held by a user, and transmits a map image that corresponds to received location information to the portable terminal, the map providing apparatus comprising:

a reference direction specifying unit that, based on the received location information, specifies a reference direction that is a direction required when a user of the portable terminal brings the map image displayed on the display unit of the portable terminal into correspondence with actual directions and that is a direction of a target object that can be visually recognized by the user from the location;

a reference direction information generating unit that generates reference direction information for having the user understand specified reference direction; and

a transmitting unit that transmits generated reference direction information together with the map image to the portable terminal.

Claim 17 (New): The map providing apparatus according to claim 16, wherein

the reference direction information generating unit generates the reference direction information as an image to be displayed, together with the map image, on the display unit.

Claim 18 (New): The map providing apparatus according to claim 17, further comprising a map image editing unit that embeds the generated reference direction

information into the map image to generate a reference direction information embedded map image, wherein

the transmitting unit transmits the reference direction information embedded map image to the portable terminal.

Claim 19 (New): The map providing apparatus according to claim 16, further comprising a map direction specifying unit that specifies a map direction in the map image to be transmitted by the transmitting unit, wherein

the reference direction specifying unit specifies a reference direction with respect to the map direction specified by the map direction specifying unit.

Claim 20 (New): The map providing apparatus according to claim 16, wherein

the target object is a shadow formed by sunlight, and

the reference direction specifying unit specifies a shadow direction to which the shadow extends, based on a date and time at which the transmitting unit transmits the reference direction information and the location information.

Claim 21 (New): The map providing apparatus according to claim 20, further comprising:

a table storing unit that stores therein a shadow direction table of, in correspondence, sets of a date and a time at each of which the transmitting unit transmits the map image and shadow directions for the sets of a date and a time, wherein

the reference direction specifying unit specifies the shadow direction that is in correspondence with the date and time by referring to the shadow direction table.

Claim 22 (New): The map providing apparatus according to claim 16, wherein

the target object is an astronomical object, and

the reference direction specifying unit specifies a direction of the astronomical object with respect to the location, based on the location information and a date and time at which the transmitting unit transmits the reference direction information.

Claim 23 (New): The map providing apparatus according to claim 16, wherein

the target object is a landmark, and

the map providing apparatus further comprises a position information storing unit that stores therein position information that indicates a position of the landmark, and

the reference direction specifying unit specifies a direction of the landmark with respect to the location, based on the position information in the position information storing unit and the received location information.

Claim 24 (New): The map providing apparatus according to claim 23, wherein

the position information storing unit stores therein a plurality of the landmarks and position information indicative of a location of each of the landmarks in corresponding manner,

the map providing apparatus further comprises a landmark selecting unit that selects, from the position information storing unit, a landmark corresponding to the reference direction information that is to be transmitted to the portable terminal, based on the received location information and the position information of the selected landmark, and

the reference direction specifying unit specifies the direction of the selected landmark.

Claim 25 (New): The map providing apparatus according to claim 24, wherein

the landmark selecting unit selects the landmark based on the direction of the landmark with respect to the location.

Claim 26 (New): The map providing apparatus according to claim 25, wherein

the transmitting unit transmits a map image that includes a route to a destination desired by the user, and

the landmark selecting unit selects the landmark, further based on a direction of the destination with respect to the location.

Claim 27 (New): The map providing apparatus according to claim 24, wherein

the landmark selecting unit selects the landmark, based on a distance between the location and the landmark.

Claim 28 (New): A portable terminal on which a map image is to be displayed, the portable terminal comprising:

a receiving unit that receives the map image;

a reference direction specifying unit that specifies a reference direction that is required when the received map image is brought into correspondence with actual directions, based on location information that indicates a location of the portable terminal;

a reference direction information generating unit that generates reference direction information for having a user of the portable terminal understand a specified reference direction; and

a display unit that displays generated reference direction information together with the map image.

Claim 29 (New): The portable terminal according to claim 28, wherein

the display unit displays the map image and the reference direction information simultaneously.

Claim 30 (New): The portable terminal according to claim 28, wherein

the receiving unit further receives map direction information that indicates a map direction that is a direction in the map image, and

the reference direction specifying unit specifies the reference direction with respect to the map direction, based on received map direction information.

Claim 31 (New): A map providing method of receiving, from a portable terminal including at least a display unit, location information indicative of a location of a portable terminal held by a user, and transmitting a map image that corresponds to received location information to the portable terminal, the map providing method comprising:

specifying, based on the received location information, a reference direction that is a direction required when a user of the portable terminal brings the map image displayed on the display unit of the portable terminal into correspondence with actual directions and that is a direction of a target object that can be visually recognized by the user from the location;

generating reference direction information for having the user understand a specified reference direction; and

transmitting generated reference direction information together with the map image to the portable terminal.

Claim 32 (New): A map displaying method of displaying a map image on a portable terminal, the map displaying method comprising:

receiving the map image;

specifying a reference direction that is required when the received map image is brought into correspondence with actual directions, based on location information that indicates a location of the portable terminal;

generating reference direction information for having a user of the portable terminal understand a specified reference direction; and

displaying generated reference direction information together with the map image.

Claim 33 (New): A computer-readable recording medium that stores therein a computer program that causes a computer to implement a map providing method of receiving, from a portable terminal including at least a display unit, location information indicative of a location of a portable terminal held by a user, and transmitting a map image that corresponds to received location information to the portable terminal, the computer program causing the computer to execute:

specifying, based on the received location information, a reference direction that is a direction required when a user of the portable terminal brings the map image displayed on the display unit of the portable terminal into correspondence with actual directions and that is a direction of a target object that can be visually recognized by the user from the location;

generating reference direction information for having the user understand a specified reference direction; and

transmitting generated reference direction information together with the map image to the portable terminal.

Claim 34 (New): A computer-readable recording medium that stores therein a computer program that causes a computer to implement a map displaying method of

displaying a map image on a portable terminal, the computer program causing the computer to execute:

receiving the map image;

specifying a reference direction that is required when the received map image is brought into correspondence with actual directions, based on location information that indicates a location of the portable terminal;

generating reference direction information for having a user of the portable terminal understand a specified reference direction; and

displaying generated reference direction information together with the map image.